

Appl. No. 10/735,613  
Amendment dated: December 27, 2006  
Reply to OA of: September 27, 2006

### **REMARKS**

This is in response to the Official Action of September 27, 2006. Applicants have amended the claims in order to more precisely define the scope of the present invention.

Specifically, Applicants have canceled claims 6-10 and added new claims 14-16. New claims 14 and 15 mirror claim 6 as presented in the previous amendment and represent a rewording of the claims so that the scope of the presently claimed invention may be better understood. Applicants also note that claim 14 is limited to unit permanent magnets in a cylindrical, disc or flat shape, while claim 15 is limited to unit permanent magnets in a spherical shape. Finally, new claim 16 mirrors claim 10 as presented in the previous amendment. Accordingly, Applicants respectfully submit that no new matter is introduced into the application by the amendments to the claims presented herein and the claims are therefore in compliance with the relevant portions of 35 U.S.C. §112.

To begin with, Applicants note that the Official Action maintains the comments set forth in paragraph 4 of the Official Action dated May 2, 2006. Paragraph 4 of the May 2, 2006 Official Action is directed to the phrase "wherein the permanent magnet ring consists of unit permanent magnets" in claim 6. Applicants respectfully submit that claims 14 and 15 now recite "A permanent magnet ring comprising a plurality of unit permanent magnets" and therefore the issue raised in paragraph 4 of the Official Action dated May 2, 2006 is moot.

Applicants again note that claims 6-10 have been canceled from the instant application. It is therefore respectfully submitted that the prior art rejections of claims 6-10 as set forth in the outstanding Official Action have been rendered moot and should therefore be withdrawn. However, to the extent that the comments set forth in the outstanding Official Action apply to the subject matter of new claims 14-16, Applicants provide the following comments.

With respect to claim 14, Applicants again note that the claim is limited to unit permanent magnets having a cylindrical, disc or flat shape. Due to the ambiguity of the

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statements set forth in the Official Action of May 2, 2006 with respect to the rejection of claims 6 and 7 as being unpatentable over Sakurai et al. (JP 11-103915 A) in view of Takeshita et al. (US Pat. No. 4,981,532), it is initially unclear which shapes are deemed by the Official Action to be disclosed by Sakurai and Takeshita. As best understood, Applicants believe that the rejection of claims 6 and 8 under 35 U.S.C. §103(a) set forth in the May 2, 2006 Official Action only applies to the embodiment of the presently claimed invention wherein the unit permanent magnet is spherical.

Applicants have deduced this from the statement made in the May 2, 2006 Official Action with respect to the rejection of claims 7 and 9 over Sakurai, Takeshita and Yellen (US Pat. No. 6,427,486). Specifically, the May 2, 2006 Official Action acknowledges that Sakurai and Takeshita fail to disclose permanent magnets meeting the shapes claimed in claims 7 and 9. Applicants note that claim 7 was directed to cylindrical unit permanent magnets and claim 9 was directed to flat shaped unit permanent magnets. Thus, Applicants respectfully submit that the Official Action has acknowledged that Sakurai and Takeshita fail to disclose unit permanent magnets with cylindrical, flat and disc shapes and further submit that the §103(a) rejection of claims 6 and 8 over Sakurai in view of Takeshita does not apply to new claim 14.

In the rejection of claims 7 and 9 as being obvious over Sakurai, Takeshita and Yellen set forth in the May 2, 2006 Official Action, it is urged that while Sakurai and Takeshita do not disclose cylindrical or flat shaped unit permanent magnets, it would have been obvious to modify the shape of the unit permanent magnets of Sakurai based upon the teaching of the Yellen reference. Specifically, the Official Action urges that Yellen teaches that it is known in the bracelet art that bracelets formed of magnetic material formed into shapes meeting the claimed limitations (i.e., cylindrical or flat) are functional equivalents to the spherical magnetic bodies used in the bracelet taught in the Sakurai invention.

Applicants have carefully reviewed the two columns of Yellen cited in support of this allegation and respectfully submit that no portion of the Yellen reference discloses cylindrical or flat shaped unit permanent magnets as being functional equivalents to the

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spherical shape unit permanent magnet. In fact, no portion of Yellen even mentions spherical shaped unit permanent magnets, and therefore Applicants fail to understand how Yellen can disclose the functional equivalence between cylindrical and flat shaped unit permanent magnets and spherical shaped unit permanent magnets. Contrary to the position taken in the Official Action, the art recognized equivalence of these shapes in the bracelet art is not revealed in Yellen. Yellen focuses primarily on cylinders and discs being interchangeable, but makes no express mention of spherical shaped magnets also being a functional equivalent for the cylinders and discs expressly contemplated.

Accordingly, Applicants respectfully submit that the Official Action has failed to establish the functional equivalence of the claimed shapes and the shapes disclosed in the primary reference and therefore cannot establish a *prima facie* case of obviousness according to the guidelines set forth in MPEP §2143.

The Official Action has also expressly declined to provide a motivation statement for combining Yellen with Sakurai and Takeshita in favor of citing case law supporting the proposition that a motivation statement is not required where there is prior art recognized equivalency. However, as stated above, the cited references do not establish art recognized equivalency and therefore a motivation statement for combining the reference is required. As no such motivation statement is provided, Applicants respectfully submit that a proper §103(a) rejection according to the guidelines set forth in MPEP §2143 cannot be established.

The final reference relied upon in the Official Action is the Hoffman reference (US Pat. No. 4,517,217), which is cited as teaching the use of a transparent abrasion-resistant film over articles previously plated with gold. However, this reference does not remedy the deficiency identified above with respect to the Sakurai, Takeshita and Yellen references. That is to say, Hoffman does not disclose a cylindrical, flat or disc shaped unit permanent magnets and/or does not disclose the art recognized equivalency between these shapes and a spherical shape.

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In light of the above, Applicants respectfully submit that neither Sakurai, Takeshita, Yellen nor Hoffman, either standing alone or when taken in combination, disclose or suggest each and every element of claims 14. Accordingly, Applicants respectfully submit that claim 14 is patentable over the references of record.

With respect to claim 15, Applicants note that the claim, as with claim 14, recites a unit permanent magnet comprising a neodymium iron boron magnet core and a plated layer formed on the surface thereof. The outstanding Official Action urges that the limitation "has a plated layer formed on the surface thereof" is a process limitation and is not further limiting in term of the structure resulting from the claimed process. Accordingly, the Official Action concludes that any layer formed on the magnet core would read on the claims of the instant application. Applicants respectfully traverse the position that reciting a plated layer does not further limit the structure of the claimed invention.

As would be well understood by one of ordinary skill in the art, the term "plating" means the overlaying of a thin coating of metal on a component to, e.g., improve conductivity, facilitate soldering, or prevent corrosion. Accordingly, Applicants respectfully submit that the recitation of a plated layer necessarily means that the layer must be a "platable" material, e.g., a metal. The specification of the instant application follows this interpretation by disclosing that exemplary materials used to plate the core magnet may be, e.g., copper or nickel. In light of this, Applicants respectfully submit that, contrary to the allegation in the Official Action, the recitation of a plated layer limits the structure of the claimed invention to those layers which are platable, including, e.g., a metal such as copper or nickel. Thus, the disclosure of any layer on the metal core does not disclose the claimed invention.

The Sakurai reference, including the English translation provided to Applicants, discloses that a ferromagnetic magnet 2 is placed inside of a nonmagnetic substance 1 as shown in, e.g., Figures 1 and 2. The reference provides no further explanation as to what materials may be used for the nonmagnetic substance. Applicants respectfully submit that in the absence of a more clear and express disclosure that the nonmagnetic

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material 1 of Sakurai may be a platable material such as copper or nickel, the reference falls short of establishing a prima facie case of obviousness according to the guidelines set forth in MPEP §2143. Applicants respectfully submit that the reference must provide more than a vague and general disclosure that the material is nonmagnetic in order to disclose or suggest a platable material as recited in the claims of the instant application. Absent such a disclosure or teaching, Applicants respectfully submit that the reference cannot properly support a §103(a) rejection of claim 15.

Finally, with respect to new claim 16, Applicants note that the Official Action relies upon Hoffman as teaching the coating of transparent abrasion-resistant material on articles that have previously been plated with gold. Therefore, Applicants respectfully submit that in order to properly combine the teaching of Hoffman, i.e., coating gold plated material with  $\text{SiO}_2$ , the primary reference must disclose a gold plated material. However, Sakurai does not disclose gold plated material. Sakurai, as discussed above, only provides the more general disclosure of a nonmagnetic material and makes no express disclosure of plating the magnet with gold. Absent a more specific teaching of a gold plated magnetic material, Applicants respectfully submit that one of ordinary skill in the art would not turn to the teaching of Hoffman, since there would be no reason to use the teaching of Hoffman when no gold plated material is disclosed in Sakurai. For this reason, Applicants respectfully submit that claim 16 is patentable over the references of record.

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In view of the above comments and further amendments to the claims, favorable reconsideration and allowance of all of the claims now present in the application are most respectfully requested.

Respectfully submitted,  
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